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10/521,257	01/13/2005	Holger Monch	DE 020178	8665

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PHILIPS INTELLECTUAL PROPERTY & STANDARDS  
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EXAMINER
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KARIMI, PEGEMAN

ART UNIT	PAPER NUMBER
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2629

MAIL DATE	DELIVERY MODE
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07/13/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/521,257

Applicant(s)

MONCH, HOLGER

Examiner

Pegeman Karimi

Art Unit

2629

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 13 January 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01/13/2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Priority***

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Specification***

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.
3. The disclosure is objected to because of the following informalities:

The phrase: *"claim 1" on Page 2, line 27.*

*"The dependent claims" on page 3, line 10.*

*"claims 2 and 3" on page 3, line 11.*

*"Claims 4 to 7" on page 3, line 14.*

*"claim 8" on page 3, line 16.*

*"claim 9" on page 3, line 18* of the specification should be deleted. This is due to the fact that these claims might be changed, renumbered, or canceled.

Appropriate correction is required

### ***Drawings***

4. Figures 3 and 4 are objected to under 37 CFR 1.83(a) because they fail to show the vertical and horizontal axis labels as described in the specification. Any

structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement-drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1, 3, and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Kavanagh (International Publication number WO 94/10675).

**As to claim 1**, Kavanagh discloses a projection system (Fig. 1) having:

a projection display (7),

at least one light source (1), and

a sensor means (41) for sensing and compensating for changes in the luminous flux emitted by the at least one light source (1, Page 10, lines 14-18), which means has at least one sensor arrangement (The sensor is located next to the light source and detecting the light with the help of a reflective mirror 43) for sensing components of the light from the light source (page 10, lines 19-22) that are directed into a region surrounding an entering face of an optical component of the projection system (5, page 6, lines 6-10).

**As to claim 3**, Kavanagh teaches a power supply unit (33, Fig. 5) of the at least one light source (1) can be controlled by the sensor arrangement (43) to compensate for the fluctuations in the luminous flux (page 14, lines 12-17).

**As to claim 9**, Kavanagh teaches having a color display for sequential color representation (page 6, lines 2-3) and, as a light source (1), at least one high-pressure gas-discharge lamp operated by alternating current (the lamp is an arc lamp and is connected to a full wave rectifier circuit, which is know to generate alternating current, page 6, lines 4-5 and page 10, lines 8-10).

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kavanagh (International Publication number WO 94/10675) in view of Allen (Pub. No. 2003/0179192).

**As to claim 2**, note the discussion of Kavanagh above. Kavanagh does not teach driver means for projection display. Allen teaches wherein a driver means (14, Fig. 1) for driving the projection display (40) can be controlled by the sensor arrangement (18) to compensate for fluctuations in the luminous flux ([0021]). Therefore it would have been obvious to one of ordinary skilled in the art at the time the invention was made to have added the display controller of

Allen to the projection display system of Kavanagh because the controller may sequence light sources and may control the display 40 so as to have them cooperate [0019], lines 17-20; also the controller in response to ambient light information, modifies the sequence of light sources and the operation of the display 40 to adjust the display of image 52 [0021], lines 9-11.

9. Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kavanagh (International Publication number WO 94/10675) in view of Anderson (U.S. Patent 6,188,427).

**As to claim 4**, note the discussion of Kavanagh above. Kavanagh does not teach the sensor arrangement being formed by a plurality of sensors that are arranged along the circumference of the optical component. Anderson teaches the sensor arrangement being formed by a plurality of sensors (30 in section b) that are arranged along the circumference of the optical component (sensors are located around the optical component 22) and are directed at the light source (col. 6, lines 37-39). Therefore it would have been obvious to one of ordinary skilled in the art at the time the invention was made to have added the plurality of sensors of Anderson to the projection system of Kavanagh because zones of pixels which are characterized as reflecting a lower combined light output as detected by sensor 30 can be utilized to determine which

corresponding light emitting elements are deficient in light output. The drive current provided to each of these light emitting elements is adjusted accordingly until the light sensor 30 detects a proper intensity of light (col. 6, lines 44-49).

**As to claim 5**, Anderson teaches the sensor arrangement is formed by an optical waveguide structure (light sensor 30, the light (as a wave) is guided through the sensor 30 to be measured), surrounding the optical component (22), to couple in incident light from the light source (22), and at least one sensor (to sense the light that is coupled in (sensor 30 at position b senses the light that is coupled in projection lens 22, Fig. 1).

10. Claims 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kavanagh (International Publication number WO 94/10675) in view of Morgan (Pub. No. 2003/0227465).

**As to claim 6**, note the discussion of Kavanagh above. Kavanagh teaches the sensor arrangement is formed by a surface (43), to scatter incident light coming from the light source (1), and a sensor (41) to sense the light that is scattered (page 10, lines 19-22). Kavanagh does not teach an optical



component. Morgan teaches an optical component (112, resonator rod).

Therefore it would have been obvious to one of ordinary skilled in the art at the time the invention was made to have added the resonator rod of Morgan to the projection device of Kavanagh because an optical resonator rod can capture the light that is reflected back ([0067], lines 3-5).

**As to claim 7**, Morgan teaches the sensor (light sensor, Fig. 25) is arranged substantially next to the light source (Light sensor is located next to lamp 110) in a direction perpendicular to the direction of propagation of the light produced by the light source (light sensor is located perpendicular to the direction of propagation of the light).

**As to claim 8**, Morgan teaches the optical component is a rod integrator (112) for homogenizing the light produced by the light source (110, Fig. 25 clearly shows the light from lamp is homogenized by the resonator rod 112 and a straight illumination light exits).

### ***Conclusion***

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Marshall (U.S. Patent 5,706,061) discloses a spatial light image display system with synchronized and modulated light source.

***Inquiries***

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pegeman Karimi whose telephone number is (571) 270-1712. The examiner can normally be reached on Monday-Thursday 8:00am - 5:00pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chanh Nguyen can be reached on (571) 272-7772. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Pegeman Karimi  
06/28/2007

  
CHANH D. NGUYEN  
SUPERVISORY PATENT EXAMINER